



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,481	01/23/2002	Carl Tung	VREX-0010USAAON00	7475
7590	04/20/2004		EXAMINER CHUNG, DAVID Y	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,481

Applicant(s)

TUNG, CARL

Examiner

David Y. Chung

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on February 13, 2004 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 8, the claim language contradicts the parent claim because direct view displays and front projection displays are mutually exclusive. Claim 8 recites that the display device is a front projection display whereas the parent claim recites that the display device is a direct view display.

As to claim 12, the language of this claim is contradictory because rear projection displays and direct view displays are mutually exclusive. One claim limitation recites that the display device is a direct view display and another claim limitation recites that the display device is a rear projection display.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Lee (WO 0021305).

Lee discloses a stereoscopic display system as shown in figure 2. Note the liquid crystal shutter glasses 14 having two liquid crystal shutters 12, polarizing film 16 located nearer to the eye, display device 10, and polarizing film 18 situated in front of the display device. The liquid crystal shutters act as active rotators by rotating the polarization of incoming light. Lee teaches that the disclosed system prevents flickering by removing polarizing film 2 shown in figure 1 (conventional art), and replacing it with polarizing film 18 shown in figure 2. See invention summary, page 2, lines 12-22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 6-9 and 11-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (WO 0021305).

As to claims 2 and 11, Lee does not disclose that polarizing films 16 and 18 have polarization angles orthogonal to each other. However, Lee does disclose that polarizing films 2 and 3 in the conventional system (figure 1) are orthogonal to each other. See discussion of related art, page 1, lines 14-21. Lee shows that it was conventional to arrange the polarizing films surrounding the liquid crystal shutters in a stereoscopic display system to be orthogonal. It would have been obvious to one of ordinary skill in the art at the time of invention to arrange polarizing films 16 and 18 to be orthogonal to each other because this was a proven design for a stereoscopic display system.

As to claims 3, 4 and 7-9, Lee discloses a polarizing film 18 mounted on the screen of display device 10. See figure 2. Lee does not disclose the specific type of display device used in the system. However, direct view displays (CRT's or LCD's), front projection displays, and rear projection displays were all proven technologies and

Art Unit: 2871

well known for being able to produce high quality images. It would have been obvious to one of ordinary skill in the art at the time of invention to use one of the three above mentioned display types, because they were proven technologies and were well known for being able to produce high quality images.

As to claim 6, Lee does not disclose that polarizing film 18 (figure 2) is substantially identical to polarizing film 2 (figure 1). However, the two polarizing films substantially provide the same function within the optical path. It would have been obvious to one of ordinary skill in the art at the time of invention to make polarizing film 18 substantially identical to the polarizing film 2 because the two polarizing films provide the same function within the optical path.

As to claim 12, Lee discloses a stereoscopic display system as shown in figure 2. Note the liquid crystal shutter glasses 14 having two liquid crystal shutters 12, polarizing film 16 located nearer to the eye, display device 10, and polarizing film 18 situated in front of the display device. The liquid crystal shutters act as active rotators by rotating the polarization of incoming light. Lee teaches that the disclosed system prevents flickering by removing polarizing film 2 shown in figure 1 (conventional art), and replacing it with polarizing film 18 shown in figure 2. See invention summary, page 2, lines 12-22.

Lee does not disclose that polarizing films 16 and 18 have polarization angles orthogonal to each other. However, Lee does disclose that polarizing films 2 and 3 in

Art Unit: 2871

the conventional system (figure 1) are orthogonal to each other. See discussion of related art, page 1, lines 14-21. Lee shows that it was conventional to arrange the polarizing films surrounding the liquid crystal shutters in a stereoscopic display system to be orthogonal. It would have been obvious to one of ordinary skill in the art at the time of invention to arrange polarizing films 16 and 18 to be orthogonal to each other because this was a proven design for a stereoscopic display system.

Lee discloses a polarizing film 18 mounted on the screen of display device 10. See figure 2. Lee does not disclose the specific type of display device used in the system. However, direct view displays (CRT's or LCD's), front projection displays, and rear projection displays were all proven technologies and well known for being able to produce high quality images. It would have been obvious to one of ordinary skill in the art at the time of invention to use one of the three above mentioned display types, because they were proven technologies and were well known for being able to produce high quality images.

As to claim 13, Lee discloses a stereoscopic display system as shown in figure 2. Note the liquid crystal shutter glasses 14 having two liquid crystal shutters 12, polarizing film 16 located nearer to the eye, display device 10, and polarizing film 18 situated in front of the display device. The liquid crystal shutters act as active rotators by rotating the polarization of incoming light. Lee teaches that the disclosed system prevents flickering by removing polarizing film 2 shown in figure 1 (conventional art), and

replacing it with polarizing film 18 shown in figure 2. See invention summary, page 2, lines 12-22.

Lee does not disclose that polarizing film 18 (figure 2) is substantially identical to polarizing film 2 (figure 1). However, the two polarizing films substantially provide the same function within the optical path. It would have been obvious to one of ordinary skill in the art at the time of invention to make polarizing film 18 substantially identical to the polarizing film 2 because the two polarizing films provide the same function within the optical path.

Lee discloses a polarizing film 18 mounted on the screen of display device 10. See figure 2. Lee does not disclose the specific type of display device used in the system. However, direct view displays (CRT's or LCD's), front projection displays, and rear projection displays were all proven technologies and well known for being able to produce high quality images. It would have been obvious to one of ordinary skill in the art at the time of invention to use one of the three above mentioned display types, because they were proven technologies and were well known for being able to produce high quality images.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (571) 272-2288. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

A handwritten signature in black ink, appearing to be 'KENNETH PARKER', written over a horizontal line.

**KENNETH PARKER
PRIMARY EXAMINER**